

Table of Contents

| | | |
|----------|---|------------|
| 1 | PURPOSE AND NEED | 1-1 |
| 1.1 | Introduction | 1-1 |
| 1.2 | Project Purpose and Programmatic Goals..... | 1-1 |
| 1.3 | Studies Conducted in Support of the Environmental Restoration Study | 1-2 |
| 1.4 | Overview of Alternatives..... | 1-3 |
| 1.5 | Description of the Study Area | 1-3 |
| 1.6 | The Ecosystem Restoration Study (ERS) | 1-4 |
| 1.6.1 | Purpose of the ERS..... | 1-4 |
| 1.6.2 | Authority to Conduct Ecosystem Restoration | 1-5 |
| 1.6.3 | Ecosystem Restoration Study Phases | 1-6 |
| 1.6.4 | Project Conception and Participants..... | 1-6 |
| 1.7 | Previous Reports and Other Ongoing Restoration Efforts | 1-7 |
| 1.7.1 | Previous Reports..... | 1-7 |
| 1.7.2 | Additional Habitat Protection and Restoration Efforts in the River Basin..... | 1-8 |
| 1.8 | Programmatic Joint NEPA/SEPA Process..... | 1-10 |
| 1.9 | Organization of this Document | 1-11 |
| 1.10 | Summary of the Scoping Process and Comments | 1-11 |
| 1.10.1 | Scoping Process..... | 1-11 |
| 1.10.2 | Summary of Scoping Comments | 14 |

1 PURPOSE AND NEED

1.1 Introduction

This programmatic NEPA/SEPA Environmental Impact Statement (EIS) has been prepared for the proposed Green/Duwamish River Basin Restoration Plan to fulfill requirements under the National Environmental Policy Act (NEPA) and the Washington State Environmental Policy Act (SEPA).

For many years resource agencies and biologists have recognized the need for habitat restoration in the Green/Duwamish River Basin. While many of these people had worked together on individual restoration projects, it became apparent that a more comprehensive approach to restoration was needed. The proposed listing of several species of salmon and trout under the Endangered Species Act provided further impetus for a more comprehensive approach.

The U.S. Army Corps of Engineers' Civil Works Ecosystem Restoration Policy (ER 1165-2-501) provided a convenient mechanism to take a broad view of the basin and its needs. An Ecosystem Restoration Study (ERS) was conducted and this programmatic EIS has been prepared as part of implementing the Ecosystem Restoration Program.

This section:

- Describes the purpose/need and goals for the project
- Describes related studies
- Provides an overview of the alternatives addressed in this EIS
- Describes the study area and problems that have been identified in the river basin
- Provides important background information about the ERS and agencies involved in restoration projects in the basin
- Discusses previous reports and other ongoing restoration efforts in the basin
- Explains the NEPA/SEPA process and how this document is organized
- Summarizes the scoping process and comments

1.2 Project Purpose and Programmatic Goals

It is the intent of the Restoration Plan to improve the overall health of the Green/Duwamish River ecosystem for fish and wildlife species by restoring (increasing) the amount and quality of habitat.

To accomplish this objective, the following basin-wide restoration goals were identified:

- Improve the physical nature of existing degraded habitat.
- Improve existing ecosystem functions and values. This includes improving riverine processes where reasonable.
- Address important factors limiting habitat productivity.

1.3 Studies Conducted in Support of the Environmental Restoration Study

This EIS is the programmatic stage of the ERS. A site-specific stage will include a plan recommending 50 restoration projects. The projects will include engineering, economic, environmental, real estate, and institutional issue analysis. Once specific projects have been identified (during the plans and specifications phase), site-specific NEPA/SEPA compliance (most likely in the form of environmental assessments) will occur.

The other studies conducted in support of this EIS include:

- **Public Involvement** - The public involvement/outreach strategy consists of the workshops associated with this EIS, development and distribution of hearings notices/news releases, development of a pool of citizen and scientific advisors, and development of Volunteer Community criteria to guide the identification of communities actively seeking restoration sites.
- **Cultural Resource Studies** - This will include an inventory and assessment to determine impacts of restoration alternatives upon historic and cultural resources.
- **Environmental Studies** - Other environmental work effort in addition to this programmatic EIS includes information management (GIS), environmental data compilation, field studies of alternative restoration sites, and site-specific field studies for selected restoration sites.
- **Fish and Wildlife Coordination Act Report** - This includes coordination with and studies conducted by the U.S. Fish and Wildlife Service, as required by the Fish and Wildlife Coordination Act.
- **Economic Analysis/Appendix** - This effort will include studies and evaluations of monetary and non-monetary benefits and costs of the proposed plan and various alternatives.
- **Real Estate Studies** - This effort will include a gross appraisal of land costs required for economic evaluation and construction of alternative plans developed during the site-specific stage of study.
- **Hydrology Studies** - This study will include hydrologic studies to support hydraulic and design studies.

- Hydraulic Studies - This effort will include hydraulic design studies for approximately 40 sites throughout the basin. The hydraulic study plan will evaluate bioengineering bank stabilization or habitat placement features.
- Geotechnical Studies - This work effort will include the investigation, exploration, and analysis of foundations and material conditions related to the selection and design of chosen restoration alternatives.
- Hazardous and Toxic Waste Studies - This study will determine the presence and character of contamination identified in an initial screening of the preferred restoration sites, and conduct a site investigation for sites having potential for waste.
- Cost Estimating and Engineering/Design Studies - These studies will include cost estimating and engineering design for up to 40 sites.

1.4 Overview of Alternatives

Three major alternatives have been identified for evaluation in this programmatic EIS: no action, the multi-species approach, and the chinook salmon species approach (the chinook salmon was recently listed as a threatened species).

- The *no action alternative* involves various agencies continuing to implement their projects as individual restoration programs that would achieve benefits under the Endangered Species Act.
- The *multi-species alternative* would result in an agency-coordinated, concerted effort to implement restoration programs that would simultaneously maximize the benefits to multiple fish and wildlife species.
- The *single threatened fish species approach* would result in an agency-coordinated, concerted effort to implement restoration programs that would benefit the recently listed chinook salmon, even if they did not benefit other species.

Three subalternatives have been identified for the multi-species and single-species approaches: developing restoration projects that replicate natural processes with minimum future maintenance, implementing engineered projects, or an integrated approach that would include a combination of these methods. These alternatives and subalternatives are described in more detail in Section 2 of this EIS.

This EIS does not address flow management or mitigation or restoration activities identified and being undertaken as a result of the Howard Hanson Dam Additional Water Storage Project Final Feasibility Study and EIS (Corps 1998a) or under other programs.

1.5 Description of the Study Area

The Green/Duwamish River Basin includes 483 square miles of King County, located in Water Resource Inventory Area 9 (WRIA 9) in west-central Washington (see Figures 1-1 and 1-2). The Green River originates in the Mt. Baker-Snoqualmie National Forest in the Cascade Mountains

of southeastern King County, south of Stampede Pass, at an elevation of about 4,500 feet. The river flows northwest 90.5 miles to Elliott Bay.

Throughout its course, the Green River passes through the Howard A. Hanson Dam, at river mile (RM) 64.5, and the Tacoma Diversion Dam (RM 61.0). The river then descends through the Green River Gorge, from RM 57. Between Flaming Geyser State Park (RM 44.0) and State Route 18 (RM 34.0), the river traverses farmlands, open space, and lands owned by King County. Near the old White River confluence, the river enters the broad and heavily urban lower Green River Valley. Levees become common on one side of the river in the middle Green River Valley at the City of Auburn (RM 31.0) and are found on both sides of the river in the Cities of Kent and Tukwila. Levee maps of this area commonly show gaps in the system, but these are typically areas of river terrace or “high bank” where the floodplain is not accessible to the river. The river is extensively channelized in these areas to the mouth.

This EIS defines the “upper basin” as starting at the crest of the Cascade Mountains and ending at Howard Hanson Dam (RM 64.5). The “middle basin” is defined as starting below Howard Hanson Dam and ending at the tide water effect (about RM 11). The “lower basin” is defined as starting at the tidally affected area in the historic Duwamish River (RM 11) and ending at Elliott Bay, on the Seattle waterfront.

This definition of basins is different from 1996 King County study of the Green/Duwamish River conducted by Fuerstenberg et al. (1996). That study defined the upper basin from the Cascade Crest to RM 45.7, the middle basin from RM 45.7 to 33.78, and the lower basin as extending from RM 33.78 to the mouth of the river.

1.6 The Ecosystem Restoration Study (ERS)

1.6.1 Purpose of the ERS

The purpose of the ERS was to analyze the current conditions of habitat and habitat-forming processes in the basin; examine the opportunities for restoring degraded structures, functions, and processes of the Green/Duwamish River ecosystem; evaluate alternative restoration strategies; and develop a preferred restoration strategy. This study was conducted at the river basin or ecosystem level. Ecosystem-level restoration provides a more comprehensive approach to addressing the problems associated with degraded resources than does focusing only on fish and wildlife habitat.

The U.S. Army Corps of Engineers (Corps) activities in ecosystem restoration concentrate on capital improvement projects and engineering solutions to water and related land resource problems, typically resulting in large-scale constructed restoration projects. Thus, the program does not lend itself to land use or regulatory solutions, although they are considered in the program evaluation process.

Many other actions must be taken to ensure that federal and local funding for these constructed restoration projects is well spent. These actions include a variety of land use and other measures, many of which are being developed and recommended through the WRIA 9 planning process (described in Section 1.7.2). The ERS will have a much greater likelihood of success if these

actions can be implemented over the same time frame as the constructed restoration projects. Because the ERS is set up to allow for phasing, concurrent implementation is possible.

1.6.2 Authority to Conduct Ecosystem Restoration

Federal involvement in ecosystem restoration is supported in law and Executive Order. The Corps Civil Works Ecosystem Restoration Policy (ER 1165-2-501), the Fish and Wildlife Coordination Act of 1958, Federal Water Project Recreation Act of 1965, National Environmental Policy Act of 1969, Water Resource Development Act (WRDA) of 1986, and the WRDA of 1990 provide national policy directing consideration of projects that benefit ecological resources. Also, legislation has been enacted authorizing studies, projects, and regional restoration programs.

In addition to the above legislation, the Corps' Civil Works Ecosystem Restoration Policy is also broadly supported in the following legislation:

- Coastal Zone Management Act of 1972
- Water Pollution Control Act of 1972
- Endangered Species Act of 1973
- Water Resource Development Act of 1988
- Water Resource Development Act of 1992
- Coastal Wetlands Planning, Protection and Restoration Act of 1990

Section 306 of the WRDA of 1990 authorized the Secretary of the Army to include environmental protection as one of the primary missions of the Corps. The ERS stems from the Corps' authority under Section 216 of the River and Harbors and Flood Control Act of 1970, which enables the Corps to undertake restoration related to the hydrologic regime of aquatic ecosystems.

King County and the local cities have recognized the potential impact on river basin restoration in the Green/Duwamish River of working with the Corps under this authority. Successful restoration depends upon coordination with agencies that are responsible for management decisions for separate ecosystem components. Thus, the Corps can take the lead in developing restoration plans with these agencies to assure that the restoration programs and projects from the various agencies complement each other. The Seattle Corps has served as the lead in developing the restoration program for the Green/Duwamish River, working with local agencies to identify, evaluate, prioritize, and coordinate implementation of potential restoration projects. (Section 1.6.4 further discusses the role of various agencies in this process.)

These local agencies have many other efforts underway to protect and restore habitat in the Green/Duwamish River Basin, and the ERS is best understood within this broader context. Section 1.7.2 further describes the context and history of this cooperative effort that has helped shape the purpose and goals for the project.

1.6.3 Ecosystem Restoration Study Phases

The ERS consists of three phases: reconnaissance, feasibility, and construction. The primary purpose of the recently completed reconnaissance phase was to determine whether there was a federal interest in proceeding to the more detailed feasibility phase of the project evaluation. During this phase, ecosystem problems and a range of potential solutions were investigated. Additional scoping for the feasibility phase was also conducted. The reconnaissance phase of the ERS was completed with issuance of a report prepared by the Corps in 1997.

In the feasibility phase, the focus is on evaluating the feasibility, cost-effectiveness, and potential benefits of the identified restoration projects, while developing preliminary design plans. The construction phase implements the restoration project or projects.

1.6.4 Project Conception and Participants

The ERS has its roots in a series of interagency meetings begun in 1995. These meetings, co-hosted by the King County Water and Land Resources Division and the City of Kent, provided a means to share information about ongoing restoration planning and implementation activities in this river basin. Agencies recognized in the initial meetings that, while significant resources were going into habitat enhancement and restoration, there was no mechanism to coordinate such efforts at the broader, river basin scale. Furthermore, existing resources were insufficient to attempt to analyze, prioritize, and address problems throughout the basin.

These early meetings resulted in the creation of a Watershed Restoration Group that represented a broad, active cross-section of river basin interests, including federal, state, and local agencies; the Muckleshoot Indian Tribe; and several community and environmental groups. From this information-sharing process, several themes became evident. First, many well-intentioned planning efforts were occurring without an overarching river basin context. No framework existed for prioritization across jurisdictional boundaries. Second, as projects were recommended through these efforts and other agency programs, they often were not funded because of a lack of available resources.

The Corps and King County have joined forces to form an Environmental Restoration Study Team. The team recognized that the ERS could be used as a means to help resolve ecosystem problems in the Green/Duwamish River Basin. The ERS provides a context, framework, and priorities for basinwide restoration, as well as an infusion of funding for restoration project implementation in this river basin. The ERS has been crafted with King County as an official local sponsor, with a supporting interlocal agreement among many of the river basin's cities to contribute to study costs.

In addition, many other agencies and community groups have contributed time and effort to developing study findings and selecting and prioritizing projects. These entities, under the auspices of the Watershed Restoration Group, have included representatives of the cities of Auburn, Kent, Renton, Seattle, Tukwila, and Tacoma (and eventually several other cities through the Green/Duwamish Watershed Forum); Muckleshoot Indian Tribe Fisheries Department; Washington Department of Fish and Wildlife; Trout Unlimited; King County; and the Corps.

1.7 Previous Reports and Other Ongoing Restoration Efforts

1.7.1 Previous Reports

A number of studies have been conducted to identify ecosystem problems in the basin and potential restoration projects, including:

- Preparation of the Basin Analysis in the 1997 Corps Reconnaissance Report. This analysis provided a history of human development in the basin, compared historical and current physical and biological conditions, and summarized the significance of those changes for fish and wildlife. Specific subbasin problems were described. A similar approach was previously used by the U.S. Forest Service for the upper watershed analysis (1996). Washington State Watershed Analyses under the Timber, Fish and Wildlife (TFW) were prepared for upper Green/Sunday and Lester, and are ongoing for Howard Hanson and Smay Creek.
- Development of a Limiting Factors Analysis by the King County Department of Natural Resources, Surface Water Management Division (Fuerstenberg et al. 1996). This analysis identified and described the fundamental impediments to ecosystem function within the Green/Duwamish River and its associated floodplain.
- Studies to identify problems within the estuarine portion of the system, including a historical overview of habitat loss (Blomberg et al. 1988). These studies were consulted during the preparation of the Reconnaissance Report.

The Corps and King County identified a variety of ecosystem functions and processes that have been degraded in the Green/Duwamish River Basin. This degradation has been evaluated in the King County Limiting Factors Analysis (Fuerstenberg et al. 1996 and Appendix B in Corps 1997) and the U.S. Forest Service's Green River Watershed Analysis (1996). These evaluations identified 10 major problems in the basin:

- Lack of habitat in the Lower Green/Duwamish Estuary
- Changes in sediment loads and transport
- Changes in flows
- Loss of channel complexity and in-channel structure
- Water quality degradation
- Barriers to fish passage
- Floodplain disconnection
- Habitat fragmentation
- Degradation of wetlands and rare species habitats

- Changes in forest structure and composition

In addition to the above problems, many of the subbasins within the study area are changing, and further development may exacerbate some problems. At the same time, restoration activities and analysis of Howard A. Hanson Dam operations and other associated projects may partially address some of the above problems.¹

1.7.2 Additional Habitat Protection and Restoration Efforts in the River Basin

Some of the many other efforts to protect and restore habitat in the Green/Duwamish River Basin are listed below. These were underway during pre-scoping of the ERS and most are still ongoing:

- Several federal efforts, including the Coastal America program, have resulted in restoration at small sites along the Duwamish River, but funds have been limited to “demonstration” projects. A settlement under the Natural Resource Damage Assessment program has also resulted in both acquisition and restoration of key sites along the estuary.
- Little restoration has occurred along the lower Green River, which is highly constrained by past levee construction and dense floodplain development. Levee maintenance programs, under the auspices of the Green River Flood Control Zone District, have incorporated habitat structures such as large woody debris (LWD) and riverbank plantings of native vegetation into repair sites. However, larger-scale improvements, such as setting back portions of levees to allow for better floodplain connectivity, have gone largely unfunded.
- Planning efforts have been underway in several subbasin tributary streams, such as Mill Creek (Auburn), Springbrook/Mill/Garrison Creeks, and others. To date, large-scale implementation of these plans has also been largely unfunded.
- Implementation of the Soos Creek Basin Plan, adopted by the King County Council in the early 1990s, has led to a coordinated approach to restoration in the middle Green River, the largest of the three subbasins. However, the priority of Soos Creek restoration, relative to other needs throughout the river basin, has not been well understood.
- The Muckleshoot Indian Tribe Fisheries Department has also undertaken many restoration projects in the Green River Basin.
- Tacoma Public Utilities Habitat Conservation Plan (HCP) is currently in draft form.

¹ The Corps and Tacoma Public Utilities began a study in August 1989 to determine whether Howard A. Hanson Dam (HHD) could be used to meet municipal and industrial (M&I) water supply and ecosystem restoration needs in the Puget Sound area. The study and resulting EIS evaluated four alternatives for increasing the storage capacity of HHD: (1) no action, (2) 22,400 acre-feet of additional storage for M&I water and fish passage, (3) 22,400 acre-feet for M&I and 9,600 acre-feet for low-flow augmentation (LFA), and (4) 20,000 acre-feet for M&I in Phase I, plus 2,400 acre-feet for M&I and 9,600 acre-feet for LFA (the preferred alternative). Under the preferred alternative, a fish passage facility would be added to HHD to allow for the passage of salmon. The total cost of the preferred alternative is \$74.9 million (1997 dollars).

- The Waterways 2000 program has resulted in acquisition of approximately 1,000 acres of land along the middle Green River, specifically for habitat protection. Funds generally have not been available to restore aquatic lands in this reach.
- Local groups, such as the Mid-Sound Fisheries Enhancement Group, Muckleshoot Indian Tribe Fisheries Department, and Trout Unlimited, have conducted projects to improve riparian vegetation. Projects have included plantings, streambank fencing in agricultural areas, and some localized channel improvements along tributaries of the Green River, most notably Newaukum Creek.
- The Corps and the City of Tacoma have been evaluating approaches to augmenting instream flows during the summer low-flow season through the Additional Water Storage project. This project encompasses increasing the height of Howard A. Hanson Dam (Corps 1998a).
- Plum Creek Timber Company, the U.S. Forest Service, the Washington Department of Natural Resources, and others have initiated several planning efforts to restore or mitigate forest practices impacts in the upper river basin.
- Volunteer groups throughout the river basin have revegetated streambanks and riparian areas, but this has not been fully coordinated and such efforts have not been prioritized.
- Restoration of fish passage through HHD is the keystone of the Additional Water Storage Project ecosystem restoration. Improved fish passage, increased in-stream flows, and fish and wildlife habitat restoration measures all provide historic opportunities to restore and maintain self-sustaining and harvestable runs of salmon and steelhead for the Green River.

Two other programs are also providing a river basin context and possible funding. These include the Regional Needs Assessment (RNA) for Surface Water, which resulted in the creation of the Green Duwamish Watershed Forum, and the WRIA 9 planning process in response to the recent listing of chinook salmon as threatened under the Endangered Species Act. Both of these are described below.

1.7.2.1 Regional Needs Assessment

The RNA is a county-wide effort to identify, quantify, and develop funding strategies for implementation of regional water resource projects related to flooding, water quality, and aquatic habitat. King County, Seattle, and all of the suburban cities within King County are participants in this effort. The Green Duwamish Watershed Forum was established in 1997 to provide a framework for local governments to work cooperatively on these regional uses in this river basin. The interlocal agreement supporting the ERS was adopted by the individual jurisdictions comprising the Forum.

The RNA process resulted in identification of approximately \$250 million in water resource projects, including over \$50 million in the Green/Duwamish River Basin. Many of the projects in the Preliminary Restoration Plan for the ERS are included in the RNA project list, and this

may provide all or a portion of the local matching funds for ERS design and construction. The RNA is now moving into a phase of specifically evaluating a variety of strategies to fund identified projects.

1.7.2.2 WRIA 9 Planning Process

In May 1999, the National Marine Fisheries Service listed Puget Sound chinook salmon as threatened under the Endangered Species Act. Local and state governmental agencies in this region have since looked for ways to cooperatively develop strategies to address the needs of this species through conservation planning, early project implementation, and related measures. Within the Green/Duwamish River Basin, this has led to development of a conservation planning process for Water Resource Inventory Area (WRIA) 9. WRIA 9 encompasses the Green/Duwamish River Basin and several independent drainages that drain directly into Puget Sound between South Seattle and Federal Way.

A conservation plan is being developed by a steering committee composed of federal, state, and local government representatives, and business and environmental representatives. This plan will evaluate a range of strategies to conserve salmonid habitat, including land use practices, policies, and regulations, improvements to governmental programs such as roadway and levee maintenance, and acquisition or restoration of aquatic lands. This last item clearly overlaps the focus areas of the ERS and, with many of the same participants involved in both projects, the ERS could serve as a significant project development component of the WRIA 9 plan.

1.8 Programmatic Joint NEPA/SEPA Process

The National Environmental Policy Act (NEPA) was enacted in 1969. The Washington State Environmental Policy Act (SEPA) was developed based upon NEPA and was enacted in 1971. Both acts allow for the preparation of a joint NEPA/SEPA EIS for a single program or project, to avoid duplication of effort and reduce paperwork when federal and state/local permits are required. For this joint EIS, the Seattle District of the Corps of Engineers is the federal NEPA lead agency and King County is the state SEPA lead agency. Each agency is responsible for assuring that the EIS meets the requirements of their respective acts and guidelines.

This programmatic EIS is aimed at developing a restoration *program* focused on capital improvements for habitat enhancement within the Green/Duwamish River Basin. The Council on Environmental Quality has approved of this programmatic approach in 40 CFR Parts 1500-1508. EISs may be prepared for broad federal and state/local actions such as adoption of new agency programs or regulations. EISs that assess agency programs, as opposed to site-specific individual projects, are called “programmatic.” The purposes of preparing a programmatic EIS are to expedite and provide a point of departure for future site-specific projects, and to facilitate the preparation of subsequent project-specific NEPA and SEPA documents through the use of “tiering” or “phasing.”

Utilizing the concepts developed in this programmatic EIS, environmental review of future projects, whether large or small, may adopt this tiering approach. These future projects would focus on site-specific issues and impacts and would incorporate by reference the relevant aspects of the EIS. By utilizing this flexible approach, the future projects in the secondary and tertiary

tiers can use the complete range of environmental evaluation provided by the NEPA/SEPA process (i.e., environmental impact statements, supplemental environmental impact statements, environmental assessments with Findings of No Significant Impact, Record of Environmental Consideration (REC), and categorical exclusions). Project-specific NEPA and SEPA documents will be prepared for each project proposed under the selected restoration approach.

Table 1-1 summarizes the major steps in the NEPA process for this EIS. The EIS process begins with a Notice of Intent being published in the Federal Register, describing the proposed action, alternatives, and the public's opportunities to comment on and participate in the EIS scoping and review processes. A meeting is held during the scoping period to obtain public and agency comments on potential major issues of concern and then the EIS is prepared. A draft EIS is issued to the public and agencies for their review and comments are received throughout the comment period. The draft EIS is then revised into a final EIS, incorporating suggestions from the public and agencies and responding to their comments.

Table 1-1 also presents the major steps in the SEPA process for this EIS. The SEPA process is essentially the same as NEPA but with slightly different time periods for the various steps.

The Corps and King County will jointly issue a draft and final NEPA/SEPA programmatic EIS. This EIS can then be adopted by each agency under their relevant acts. Following review and finalization of the EIS, the lead agencies will issue a Record of Decision that identifies the alternative to be implemented for natural resource restoration.

1.9 Organization of this Document

This document is organized into two volumes. Volume I contains the programmatic EIS, which evaluates the effects of the restoration program alternatives and subalternatives on the biological and built portions of the environment. Volume II contains the restoration plan identifying what projects are to be developed under the restoration program, as well as where and how they would be implemented.

1.10 Summary of the Scoping Process and Comments

1.10.1 Scoping Process

An initial step in preparing the draft EIS was to define the scope or limits of the work, generally described as "scoping." The Notice of Intent to prepare the Green/Duamish River Basin EIS was published by the U.S. Army Corps of Engineers in the Federal Register (Volume 63, No. 246, pages 71109-71110) on December 23, 1998. This began the formal scoping process for the EIS. In this notice, the public was invited to provide written comments on the scope and content of the EIS, ask questions about the EIS, request to be included on the EIS mailing list, and request copies of any documents associated with the EIS.

The time and location of the scoping meeting were publicized in display advertisements in the Seattle Times/Post Intelligencer on January 13, 1999, and the South County Journal on January 16, 1999. In addition, a meeting notice was sent to approximately 3,200 agencies, organizations, and individuals on the EIS mailing list. The comment period ended on February 3, 1999, which

was 43 days from initiation on December 23. The Corps and King County did not receive any written comments during this scoping period.

Table 1-1. Summary of Steps Required under NEPA and SEPA for Green/Duwamish River EIS

| Step | NEPA Process | SEPA Process | Step Completed? |
|--|---|---|------------------------|
| Determine the lead agency | U.S. Army Corps of Engineers, Seattle District, determined to be the federal lead | King County determined to be the state lead | Yes |
| Notify the public that an EIS will be prepared | Notice of Intent published in Federal Register | Determination of Significance published in SEPA Register | Yes |
| Gather public input on issues the EIS should address and the range of reasonable alternatives to be analyzed | Open house/scoping meeting held | Open house/scoping meeting held | Yes |
| | Notice of 45-day scoping period published in local newspapers | Notice of 45-day scoping period published in local newspapers (21-day minimum required) | Yes |
| Publish the draft EIS | Prepare draft EIS | Prepare draft EIS | Yes |
| | Publish a Notice of Availability in the Federal Register | Publish a Notice of Availability in the SEPA Register | |
| | Issue the EIS to agencies and the public | Issue the EIS to agencies and the public | |
| Collect public comments on the draft EIS | 45-day comment period | 45-day comment period (30-day minimum required) | No |
| | Open house/comment meeting held | Open house/comment meeting held | |
| Issue final EIS | Revise the draft EIS based on comments | Revise the draft EIS based on comments | No |
| | Issue the final EIS | Issue the final EIS | |
| Agencies decide on preferred alternative and monitoring program | Publish Record of Decision in Federal Register | Publish decision in SEPA Register | No |
| Site-specific restoration projects tiered to programmatic EIS | Project-specific NEPA documentation completed for each project | Project-specific SEPA documentation completed for each project | No |
| Implementation | Implement project, monitor and mitigate impacts | Implement project, monitor and mitigate impacts | No |

An open house and scoping meeting were held to provide the public with an early opportunity to engage in discussions regarding the EIS and to provide oral and written comments. The open house/scoping meeting was held at the Tukwila Community Center, 12424 - 42nd Avenue South, Tukwila, Washington, from 6:30 p.m. to 9:00 p.m. on January 20, 1999. During the open house portion of the meeting, from 6:30 p.m. to 7:00 p.m., the public could engage in discussions with the Corps and King County staff and ask questions about the study area and alternatives. The formal scoping portion of the meeting occurred from 7:00 p.m. to 9:00 p.m., when oral and written comments were taken. Thirty-one people participated in the scoping meeting.

1.10.2 Summary of Scoping Comments

Table 1-2 summarizes issues raised at the January 20 scoping meeting. Only issues that were relevant to this programmatic EIS are summarized. Comments regarding other issues are summarized in more detail in Appendix A, Scoping Summary.

Table 1-2. Summary of Relevant Issues Raised at Scoping Meeting

| Issue | Where this Issue is Addressed in EIS |
|--|--------------------------------------|
| The impacts of large woody debris on river recreation | Section 4.13, Recreation |
| The impacts of large woody debris movement on private shorelines | Section 4.4, Geologic Resources |
| The effects of soil erosion from soil disturbance | Section 4.4, Geologic Resources |
| Effects of a major flood on restoration projects | Section 3.2, Water Resources |

